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APPLICANT:

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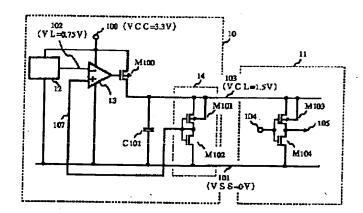
UEDA SHIGEKI;

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TITLE

SIGNAL INPUT CIRCUIT



ABSTRACT :

PURPOSE: To hardly decrease the operation margin of the signal input circuit receiving an input signal from the outside of a MOSLSI chip even with the characteristic dispersion of the element or a power supply voltage, and to hardly cause mulfunction.

CONSTITUTION: A reference voltage circuit 12 uses a threshold voltage difference of a MOSFET to generate a reference voltage and it is not changed due to fluctuation in a power supply voltage. A logic threshold voltage of a signal input circuit 11 is halved to the voltage amplitude of the input signal and the internal power supply voltage. Constants of TRs of the logic threshold voltage detection circuit 14 are matched with those of the signal input circuit 11 to make the logic threshold voltage equal. When the threshold voltage of a TR M104 of the signal input circuit 11 gets lower, the threshold voltage of the TR M102 is lower, the feedback rate of a feedback circuit is decreased, the internal power supply voltage VCL is increased and the logic threshold voltage of the signal input circuit 11 gets higher. This is similar to other dispersion in the constants of the TRs.

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